TABLE—COLD CO FUEL SPECIFICATIONS—Continued

| Item | ASTM test | Cold CO low octane value or range | Cold CO high octane [1] value or range |
|---|---|---|---|
| Sulfur, wt. % | D3120 | 0.035±0.015 | 0.020±0.015 |
| Phosphorous, g/U.S gal, max | D3231 | 0.005 | 0.005 |
| Lead, g/gal, max | | 0.01 | 0.01 |
| RVP, psi | D4953 | 11.5±.3 | 11.5±.3 |
| Hydrocarbon composition | D1319 | | |
| Olefins, vol. pct | | 12.5±5.0 | 10.0±5.0 |
| Aromatics, vol. pct | | 26.4±4.0 | 32.0±4.0 |
| Saturates | | Remainder | Remainder |

[1] Gasoline having these specifications may be used for vehicles which are designed for the use of high-octane premium fuel.

### § 86.214–94 Analytical gases.

The provisions of § 86.114–94 apply to this subpart.

### § 86.215–94 EPA urban dynamometer driving schedule.

The provisions of § 86.115–78 apply to this subpart.

### § 86.216–94 Calibrations, frequency and overview.

The provisions of § 86.116–94 apply to this subpart.

### § 86.217–94 [Reserved]

### § 86.218–94 Dynamometer calibration.

The provisions of § 86.118–78 apply to this subpart.

### § 86.219–94 CVS calibration.

The provisions of § 86.119–90 apply to this subpart.

### § 86.220–94 [Reserved]

### § 86.221–94 Hydrocarbon analyzer calibration.

The provisions of § 86.121–90 apply to this subpart.

### § 86.222–94 Carbon monoxide analyzer calibration.

The provisions of § 86.122–78 apply to this subpart.

### § 86.223–94 Oxides of nitrogen analyzer calibration.

The provisions of § 86.123–78 apply to this subpart if $NO_X$ measurements are optionally made.

### § 86.224–94 Carbon dioxide analyzer calibration.

The provisions of § 86.124–78 apply to this subpart.

### § 86.225–94 [Reserved]

### § 86.226–94 Calibration of other equipment.

The provisions of § 86.126 apply to this subpart.

### § 86.227–94 Test procedures; overview.

The provisions of § 86.127–94 (a), (b), and (e) apply to this subpart.

### § 86.228–94 Transmissions.

The provisions of § 86.128–79 apply to this subpart.

### § 86.229–94 Road load force, test weight, and inertia weight class determination.

(a) Flywheels, electrical forces, or other means of simulating test weight as shown in the table in this paragraph shall be used. If the equivalent test weight specified is not available on the dynamometer being used, the next higher equivalent test weight (not to exceed 250 pounds) available shall be used. Light-duty vehicles over 5750 lbs. loaded vehicle weight shall be tested at a 5,500 lb. equivalent test weight.

| Loaded vehicle weight (pounds) | Equivalent test weight (pounds) | Inertia weight class (pounds) |
|---|---|---|
| Up–1,062 | 1,000 | 1,000 |
| 1,063–1,187 | 1,125 | 1,000 |
| 1,188–1,312 | 1,250 | 1,250 |
| 1,313–1,437 | 1,375 | 1,250 |
| 1,438–1,562 | 1,500 | 1,500 |
| 1,563–1,687 | 1,625 | 1,500 |
| 1,688–1,812 | 1,750 | 1,750 |
| 1,813–1,937 | 1,875 | 1,750 |
| 1,938–2,062 | 2,000 | 2,000 |
| 2,063–2,187 | 2,125 | 2,000 |
| 2,188–2,312 | 2,250 | 2,250 |
| 2,313–2,437 | 2,375 | 2,250 |
| 2,438–2,562 | 2,500 | 2,500 |
| 2,563–2,687 | 2,625 | 2,500 |
| 2,688–2,812 | 2,750 | 2,750 |
| 2,813–2,937 | 2,875 | 2,750 |

| Loaded vehicle weight (pounds) | Equivalent test weight (pounds) | Inertia weight class (pounds) |
|---|---|---|
| 2,938–3,062 | 3,000 | 3,000 |
| 3,063–3,187 | 3,125 | 3,000 |
| 3,188–3,312 | 3,250 | 3,000 |
| 3,313–3,437 | 3,375 | 3,500 |
| 3,438–3,562 | 3,500 | 3,500 |
| 3,563–3,687 | 3,625 | 3,500 |
| 3,688–3,812 | 3,750 | 3,500 |
| 3,813–3,937 | 3,875 | 4,000 |
| 3,938–4,125 | 4,000 | 4,000 |
| 4,126–4,375 | 4,250 | 4,000 |
| 4,376–4,625 | 4,500 | 4,500 |
| 4,626–4,875 | 4,750 | 4,500 |
| 4,876–5,125 | 5,000 | 5,000 |
| 5,126–5,375 | 5,250 | 5,000 |
| 5,376–5,750 | 5,500 | 5,500 |
| 5,751–6,250 | 6,000 | 6,000 |
| 6,251–6,750 | 6,500 | 6,500 |
| 6,751–7,250 | 7,000 | 7,000 |
| 7,251–7,750 | 7,500 | 7,500 |
| 7,751–8,250 | 8,000 | 8,000 |
| 8,251–8,750 | 8,500 | 8,500 |
| 8,751–9,250 | 9,000 | 9,000 |
| 9,251–9,750 | 9,500 | 9,500 |
| 9,751–10,000 | 10,000 | 10,000 |

(b) A dynamometer which meets the specifications of §86.208–94(a) shall be adjusted to simulate the operation of a vehicle on the road at 20 °F (−7 °C). Such adjustment may be based on a determination of the road load force profile at 20 °F (−7 °C). Alternatively, the adjustment may be based on a 10 percent decrease in the target coastdown time that is used for FTP testing.

### § 86.230–11 Test sequence: general requirements.

(a) *Sequence steps.* Figure C94–1 of §86.230–94 shows the steps encountered as the test vehicle undergoes the procedures subsequently described, to determine conformity with the standards set forth.

(b) *Driving schedule.* The Urban Dynamometer Driving Schedule (UDDS) test procedure (see §86.115 and appendix I to this part) is used for vehicle preconditioning and testing.

(c) *Ambient temperature level.* (1) Ambient temperature levels encountered by the test vehicle shall average 20° ±5°F (−7°C ±2.8°C) and shall not be less than 10°F (−14°C) nor more than 30°F (−1°C) during vehicle preconditioning, except for preconditioning performed in accordance with §86.232(a)(7), and during all emission testing.

(2) The ambient temperature reported shall be a simple average of the test cell temperatures measured at constant intervals no more than one minute apart. Before the driving cycle may begin, the test cell temperature shall be 20°F ±3°F (−7°C ±1.7°C) when measured in accordance with paragraph (e)(2) of this section. The temperature may not exceed 25°F (−4°C) or fall below 15°F (−9°C) for more than three consecutive minutes during the test.

(d) *Vehicle positioning.* The vehicle shall be approximately level during all phases of the test sequence to prevent abnormal fuel distribution.

(e) *Engine compartment cooling.* (1) Fixed speed air cooling of the engine compartment with the compartment cover open shall be utilized during testing that is conducted by the Administrator and, optionally for certification testing, by the manufacturer. If a separate movable fan is used, it shall be squarely positioned within 12 inches (30.5 centimeters) of the front of vehicles with front engine compartments. In the case of vehicles with rear engine compartments (or if special designs make the normal front engine positioning impractical), the cooling fan shall be placed in a position to provide sufficient air to maintain vehicle cooling. The fan capacity shall normally not exceed 5,300 cfm (2.50 cubic meters per second). If, however, the manufacturer showed (as provided in §86.135–94(b)) that additional cooling is necessary, the fan capacity may be increased or additional fans used if approved in advance by the Administrator. The cooling air temperature shall be measured at the inlet to the fan.

(2) In lieu of using a separate fan, an air handling system that is integral with the test cell may be used provided comparable air movement is obtained. The cooling air temperature shall be measured in the center of a vertical plane that is located approximately 2 feet in front of the vehicle.

(3) The manufacturer may use, for certification testing, alternative engine compartment cooling fans or systems, including those which provide a variable air flow, if the manufacturer has determined that comparable results are obtained.

(f) *Heater and defroster usage.* The vehicle interior climate control system